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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/182,911

10/30/1998

BARRY G. WILKS

0100.9800830

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02/24/2006

ATI TECHNOLOGIES, INC.  
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EXAMINER

LESPERANCE, JEAN E

ART UNIT

PAPER NUMBER

2674

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/182,911	<b>Applicant(s)</b> WILKS, BARRY G.	
	<b>Examiner</b> Jean E Lesperance	<b>Art Unit</b> 2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 November 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4-6, 8, 10-18, 20-22, 24-26, 29, 35-37, 39 and 41-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-6, 20-22, 24-26, 35-37, 44 and 46-49 is/are allowed.
- 6) ☒ Claim(s) 8, 12-15, 18, 29, 39, 43, and 45 is/are rejected.
- 7) ☒ Claim(s) 10, 11, 16, 17, 41 and 42 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 1998 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. The amendment filed on November 28, 2005 is entered and claims 4-6, 8, 10-18, 20-22, 24-26, 29, 35-37, 39, 41-49 are pending.

### *Response to Arguments*

2. Applicant's arguments with respect to claims 4-6, 8, 10-18, 20-22, 24-26, 29, 35-37, 39, 41-49 have been considered but are moot in view of the new ground(s) of rejection.

### Claim Rejections - 35 U.S. C. § 103

3. The following is a quotation of 35 U. S. C. 103 (a), which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8, 12-15, 18, 29, and 45 are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. Patent # 4,990,902 ("Zenda") in view of U.S. Patent # 6,067,071 ("Kotha et al.") and further in view of Derwent Patent Application # DE004441745A1 ("Le").

Regarding claim 8, Zenda teaches a multiple display supporting module (Figs.2B, 2C and 2D) comprises:

a processing module (a CPU Fig. 1 (1)); and

memory operably coupled to the processing module (ROM Fig. 1 (5)), wherein the memory includes operational instructions that cause the processing module to:

a) receiving capability parameters regarding a first display of the multiple displays (a CRTC 13 receives a display timing signal parameter on system bus 3 in synchronism with display timing set command a supplied from CPU 1 through AND gate 15 (column 4, lines 11-14));

c) providing the selected display capabilities to an operating system (display resolution selecting means selects a display resolution (column 8, lines 43-44));

operational instructions that cause the processing module to determine the selected display capabilities based on a composite of the display parameters of each multiple displays (a display area control system for displaying on a flat panel display apparatus applied data generated by a desired application program, the display apparatus having the capability to display data corresponding to a plurality of different display resolutions (column 7, 8-13)). Accordingly, Zenda teaches all the claimed limitations as recited in claims 4, 5, and 20 with the exception of providing the capability parameters comprise display resolution and display pixel depth.

However, Kotha et al. teach two video signals having different refresh rates and resolutions (column 5, lines 25-26) corresponding to a display resolution and display pixel depth.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize video signals with different refresh rate as taught by Kotha et al. in the display area control system disclosed by Zenda because this would allow

the display controller to output at least one of a plurality of different graphics display resolutions to a fixed resolution panel display.

Accordingly, the combination of Zenda and Kotha teaches all the claimed limitations with the exception of providing substituting selected display capabilities for the received capability parameters.

However, Le teaches two parameters that has to be monitored, it can replace the display for that parameter to be monitored by one for the other (abstract).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize the parameter as taught by Le in the modified system disclosed by the combination of Zenda and Kotha because this would allow the parameters of the two displays to be monitored.

Regarding claim 12, Zenda teaches When the power switch of the system is turned on, CPU 1 executes the display area control processing routine in BIOS 21 (column 4, lines 46-48) corresponding the memory further comprises operational instructions that causes the processing module to receive capability parameters in accordance with a system start-up and to monitor change process.

Regarding claim 13, Zenda teaches a digital storage medium for storing operational instructions that cause a processing module to support multiple displays associated with a drawing surface (BIOS, Fig. 1 (21), the digital storage medium comprises:

first memory means for storing a plurality of parameters for generating the different display timing signals in correspondence with a plurality of display resolutions (column 1, lines 56-59);

second memory means for storing the parameter for generating the display timing signal read out from the first memory means (column 1, lines 59-61) and ROM Fig.1 (5) read only memory stores parameters corresponding to the third memory means. Accordingly, Zenda teaches all the claimed limitations as recited in claims 4, 5, and 20 with the exception of providing the capability parameters comprise display resolution and display pixel depth.

However, Kotha et al. teach two video signals having different refresh rates and resolutions (column 5, lines 25-26) corresponding to a display resolution and display pixel depth.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize video signals with different refresh rate as taught by Kotha et al. in the display area control system disclosed by Zenda because this would allow the display controller to output at least one of a plurality of different graphics display resolutions to a fixed resolution panel display.

Accordingly, the combination of Zenda and Kotha teaches all the claimed limitations with the exception of providing substituting selected display capabilities for the received capability parameters.

However, Le teaches two parameters that has to be monitored, it can replace the display for that parameter to be monitored by one for the other (abstract).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize the parameter as taught by Le in the modified system disclosed by the combination of Zenda and Kotha because this would allow the parameters of the two displays to be monitored.

Regarding claim 14, Zenda teaches first memory means for storing a plurality of parameters for generating the different display timing signals in correspondence with a plurality of display resolutions (column 1, lines 56-59).

Regarding claim 15, Zenda teaches an application program (note that an application program includes an operating system program hereinafter) developed for a CRT display (video graphics card) apparatus, is executed using a plasma display apparatus, if a designated display resolution is different from a currently set display resolution, a display timing signal generating parameter corresponding to the designated display resolution is set in a display timing register in a CRT controller. Thereafter, the content of the display timing register is inhibited from being changed until the execution of the application program is completed (column 2, lines 3-14).

Regarding claim 18, Zenda teaches an application program (note that an application program includes an operating system program hereinafter) developed for a CRT display apparatus, is executed using a plasma display apparatus, if a designated display resolution is different from a currently set display resolution, a display timing signal generating parameter corresponding to the designated display resolution is set in a display timing register in a CRT controller. Thereafter, the content of the display

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timing register is inhibited from being changed until the execution of the application program is completed.

Regarding claim 29, Kotha et al. teach To faithfully provide two distinct display resolutions, it may be desirable to generate two separate signals for two video displays having different resolutions, pixel depths, and/or refresh rates (column 4, lines 34-38).

Regarding claim 45, Zenda teaches display timing signal generating parameters (PD) having display timings for forming upper and lower non-display areas of 25 dots, as shown in FIG. 2B, are read out from ROM 5, and are set in display timing register 14 of CRTC 13 through system bus 3. As a result, CRTC 13 generates display timing signals based on input parameters PD, and supplies

the signals to plasma display apparatus 7 through pallet 11 (column 5, lines 67 and 69 and column 6, lines 1-7).

4. Claims 39 and 43 are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. Patent # 4,990,902 ("Zenda") in view of Derwent Patent Application # DE004441745A1 ("Le").

Regarding claim 39, Zenda teaches a multiple display supporting module (Figs.2B, 2C and 2D) comprises:

a CPU Fig. 1 (1) corresponding to a processing module; and

ROM Fig. 1 (5) corresponding to memory operable coupled to the processing module, wherein the memory includes operational instructions that cause the processing module to a CRTC 13 receives a display timing signal parameter on system



bus 3 in synchronism with display timing set command a supplied from CPU 1 through AND gate 15 (column 4, lines 11-14) corresponding to a) receiving capability parameters regarding a first display of the multiple displays; and

display resolution selecting means selects a display resolution (column 8, lines 43-44) corresponding to c) providing the selected display capabilities to an operating system;

a display area control system for displaying on a flat panel display apparatus applied data generated by a desired application program, the display apparatus having the capability to display data corresponding to a plurality of different display resolutions (column 7, 8-13) corresponding to operational instructions that cause the processing module to determine the selected display capabilities based on a composite of the display parameters of each multiple displays. Accordingly, the prior art teaches all the claimed limitations with the exception of providing substituting selected display capabilities for the received capability parameters.

However, Le teaches two parameters that has to be monitored, it can replace the display for that parameter to be monitored by one for the other (abstract).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize the parameter as taught by Le in the display area disclosed by Zenda because this would allow the parameters of the two displays to be monitored.

Regarding claim 43, Zenda teaches the display timing parameters must correspondingly be changed when a display screen is changed (column 3, lines 11 and

12) corresponding to receiving the capability parameters in response to a monitor change process.

***Allowable Subject Matter***

5. Claims 10, 11, 16, 17, 41, and 42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 4-6, 20-22, 24-26, 35-37, 44 and 46-49 are allowed.

7. The following is an examiner's statement of reasons for allowance: the claimed invention is directed to a method for supporting multiple displays per drawings surface.

Independent claim 4 identifies a uniquely distinct feature "using the selected display capabilities of the second display with said first display and wherein step (a) further comprises receiving the capability parameters in accordance with a system start-up".

Independent claim 20 identifies a uniquely distinct feature "providing the selected display capabilities of the second display to an operating system and using the display capabilities of the second display with each of said multiple displays and wherein step (a) further comprises receiving the capability parameters in accordance with a system start-up".

Independent claim 24 identifies a uniquely distinct feature "wherein the memory further comprises operational instructions that cause the processing module to receive the capability parameters in accordance with a system start-up".

Independent claim 35 identifies a uniquely distinct feature "providing the selected display capability parameters of said second display to an operating system and using the display parameters of said second display with other displays of the multiple displays and wherein the display capability parameters are received in accordance with system start".

### **Conclusion**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Lesperance whose telephone number is (571) 272-7692. The examiner can normally be reached on from Monday to Friday between 10:00AM and 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard, can be reached on (571) 272-7603.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D. C. 20231

**or faxed to:**

(571) 273-8300 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park 11, 2121 Crystal drive, Arlington, VA, Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Jean Lesperance



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Date 2/20/2006



PATRICK N. EDOUARD  
SUPERVISORY PATENT EXAMINER